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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/955,885	09/19/2001	Yasutoshi Hirano	2271/65888	9849

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EXAMINER

TRAN, DENISE

ART UNIT	PAPER NUMBER
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2186

DATE MAILED: 12/09/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/955,885

Applicant(s)

HIRANO, YASUTOSHI

Examiner

Denise Tran

Art Unit

2186

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 26 February 2002.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-14 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-14 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 19 September 2001 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. §§ 119 and 120

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.
- a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 2.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

1. Claims 1-14 are presented for examination.
2. The specification is objected to as failing to provide proper antecedent basis for the claimed subject matter. See 37 CFR 1.75(d)(1) and MPEP § 608.01(o). Correction of the following is required: the specification fails to provide proper antecedent basis for "a clock signal control part" claim 1; "said clock signal control part comprises a forward circuit part and a clock control part . . . " claim 3. Claims 2 and 4-14 have the similarly problems as discussed above.
3. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the "clock signal control part" claim 1; "said clock signal control part comprises a forward circuit part and a clock control part . . . " claim 3. Claims 2 and 4-14 have the similarly problems as discussed above, must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

4. Claim 8 is objected to because of the following informalities: "to said digital signal processor to said digital signal processor" line 11-12 should be -- to said digital signal processor--. Appropriate correction is required.

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

6. Claims 1-7 are rejected under 35 U.S.C. 102(b) as being anticipated by Pawate et al., U.S. Patent No. 5,638,530 (hereinafter Pawate).

As per claim 1, Pawate teaches the use of signal processing apparatus (e.g. figure 2) comprising:

a digital signal processor (e.g. element 100, figure 2) comprising an internal memory part storing a program to be executed (e.g. element 150, 160, figure 2);

an external memory part storing programs executable in the digital signal processor (e.g. col. 13, line 59 to col. 14, line 48) (it is an inherent feature that when the host downloads information to the shared memory of the DSP processor it is doing it from the host memory inside the PC (e.g. element 200, figure 1) because this allows the information to be stored and then used at a later time, such as downloading it);

a clock signal generating part generating a clock signal and outputting the clock signal to the digital signal processor (e.g. element 181, figure 2); and

a clock signal control part controlling outputting of the clock signal to the digital signal processor so that the programs stored in the external memory part can be forwarded to the internal memory part (e.g. col. 13, line 59 to col. 14, line 48 and figure 2, elements 110-140, 180).

As per claim 2, Pawate teaches the use of the clock signal control part forwards the programs read from said external memory part to the internal memory after stopping outputting the clock signal to the digital signal processor (e.g. col. 13, line 59 to col. 14, line 48).

As per claim 3, Pawate teaches the use of the clock signal control part comprises a forward circuit part and a clock control part, the clock control part stops outputting the clock signal to the digital signal processor after the forward circuit part supplies the clock control part with a signal requesting that the clock control part stops outputting the clock signal to the digital signal processor so that the programs stored in the external memory part can be forwarded to the internal memory part (e.g. col. 13, line 59 to col. 14, line 58).

As per claim 4, Pawate teaches the use of the clock control part restarts outputting the clock signal to the digital signal processor after the forward circuit part supplies the clock control part with a signal requesting that the clock control part outputs the clock signal to the digital signal processor when the programs stored in the external

memory part are completely forwarded to the internal memory part (e.g. col. 13, line 59 to col. 14, line 58).

As per claims 5 and 6, Pawate teaches the use of the clock signal control part controls outputting of the clock signal to the digital signal processor in compliance with a request from the digital signal processor (e.g. col. 9, lines 1-15) and in compliance with a request from an outside of the signal processing apparatus (e.g. col. 14, lines 5-10).

As per claim 7, Pawate teaches the use of the clock signal control part comprises a forward circuit for forwarding a desired part of the programs read from the external memory part to the internal memory (e.g. element 180, figure 2).

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. Claims 8-14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nakajima et al., JP01264034A (hereinafter Nakajima, in view of Pawate et al., U.S. Patent No. 5,638,530 (hereinafter Pawate).

As per claim 8, Nakajima shows the use of a modem for modulating / demodulating a communication data by using a signal processing apparatus (e.g. abstract) comprising:

A digital signal processor comprising an internal memory part storing a program to be executed (e.g. abstract and figure 1). Nakajima does not disclose an external memory part storing programs executable in said digital signal processor; a clock signal generating a clock signal and outputting the clock signal to said digital signal processor to said digital signal processor; and a clock signal control part controlling outputting of said clock signal to said digital signal processor so that said programs stored in said external memory part can be forwarded to said internal memory part.

Pawate shows the use of a digital signal processor (e.g. element 100, figure 2) comprising an internal memory part storing a program to be executed (e.g. element 150, 160, figure 2);

an external memory part storing programs executable in the digital signal processor (e.g. col. 13, line 59 to col. 14, line 48) (it is an inherent feature that when the host downloads information to the shared memory of the DSP processor it is doing it from the host memory inside the PC (e.g. element 200, figure 1) because this allows the information to be stored and then used at a later time, such as downloading it);

a clock signal generating part generating a clock signal and outputting the clock signal to the digital signal processor (e.g. element 181, figure 2); and

a clock signal control part controlling outputting of the clock signal to the digital signal processor so that the programs stored in the external memory part can be

forwarded to the internal memory part (e.g. col. 13, line 59 to col. 14, line 48 and figure 2, elements 110-140, 180).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine Pawate with Nakajima because it would provide for the re-configuration of the modem with additional programs and allowing the host to directly access the memory without arbitration.

As per claim 9, Nakajima does not specifically show the limitations of claim 9. Pawate teaches the use of the clock signal control part forwards the programs read from said external memory part to the internal memory after stopping outputting the clock signal to the digital signal processor (e.g. col. 13, line 59 to col. 14, line 48).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine Pawate with Nakajima because it would provide for the re-configuration of the modem with additional programs and allowing the host to directly access the memory without arbitration.

As per claim 10, Nakajima does not specifically show the limitations of claim 10. Pawate teaches the use of the clock signal control part comprises a forward circuit part and a clock control part, the clock control part stops outputting the clock signal to the digital signal processor after the forward circuit part supplies the clock control part with a signal requesting that the clock control part stops outputting the clock signal to the digital signal processor so that the programs stored in the external memory part can be

forwarded to the internal memory part (e.g. col. 13, line 59 to col. 14, line 58). It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine Pawate with Nakajima because it would provide for the re-configuration of the modem with additional programs and allowing the host to directly access the memory without arbitration.

As per claim 11, Nakajima does not specifically show the limitations of claim 11. Pawate teaches the use of the clock control part restarts outputting the clock signal to the digital signal processor after the forward circuit part supplies the clock control part with a signal requesting that the clock control part outputs the clock signal to the digital signal processor when the programs stored in the external memory part are completely forwarded to the internal memory part (e.g. col. 13, line 59 to col. 14, line 58). It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine Pawate with Nakajima because it would provide for the re-configuration of the modem with additional programs and allowing the host to directly access the memory without arbitration.

As per claims 12 and 13, Nakajima does not specifically show the limitations of claims 12 and 13. Pawate teaches the use of the clock signal control part controls outputting of the clock signal to the digital signal processor in compliance with a request from the digital signal processor (e.g. col. 9, lines 1-15) and in compliance with a request from an outside of the signal processing apparatus (e.g. col. 14, lines 5-10). It

would have been obvious to one of ordinary skill in the art at the time the invention was made to combine Pawate with Nakajima because it would provide for the re-configuration of the modem with additional programs and allowing the host to directly access the memory without arbitration.

As per claim 14, Nakajima does not specifically show the limitations of claim 14. Pawate teaches the use of the clock signal control part comprises a forward circuit for forwarding a desired part of the programs read from the external memory part to the internal memory (e.g. element 180, figure 2). It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine Pawate with Nakajima because it would provide for the re-configuration of the modem with additional programs and allowing the host to directly access the memory without arbitration.

9. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

- a) Pawate et al. (6584588 B10) is cited to show the DSP/memory module;
- b) Ninomiya (5764968) is cited to show clock supply permission/inhibition control system;
- c) Kohlschmidt (6029061) is cited to show controlling the use of DSP with a clock;
- d) Asghar et al. (5790817) is cited to show controlling clock rates of DSPs.

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Denise Tran whose telephone number is (703) 305-9823. The examiner can normally be reached on Monday, Thursday and an alternated Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Matt Kim can be reached on (703) 305-3821. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 872-9306 for central Official communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-3900.



D.T.
December 1, 2003